

Comprehensive it certainly is: the Index of Authors extends over eight pages in double column; the abstracts themselves average three to a fairly closely-printed page.

It is explained in a Preface that the Editorial policy has been to assemble the abstracts in a practical sequence which does not correspond exactly with the titles of the symposia. There are eighteen sections, starting with "Complex loci" and ending with "Citation indexing". Readers of this REVIEW will probably be most interested in the eighty-four abstracts in the "Human Genetics" series, the forty-seven in "Human Cytogenetics" and the sixteen in "Dermatoglyphics". At the risk of seeming parochial, we confine ourselves to a brief mention of the British contributions in these sections.

C. A. B. Smith writes on Scoring for Linkage Between Several Loci, J. H. Renwick on Male and Female Recombination Fractions in Man, R. F. J. Withers on Familial Correlations in Human Obesity. J. Lorber reports the work of a large unit which has been established in Sheffield Children's Hospital for the care and study of infants born with spina bifida cystica; C. R. Fraser on the aetiology of deafness, following studies on 2,355 children attending special schools for the deaf. Monozygotic twins of different sex were described in a demonstration by T. Dent and J. H. Edwards. In the dermatoglyphics section, G. F. Smith and G. M. Turrall contribute a study of the hallal area of the sole in mongoloids, non-mongoloid mental defectives and a control group, and Sarah B. Holt describes some striking dermatoglyphic anomalies associated with abnormal sex chromosomes.

Volumes 2 and 3 will contain the full texts of the abstracts here published and volume 3 will reproduce the list of authors, with their addresses, as given in the membership list which was supplied to those present at the Congress.

The editors, printer and publisher must be commended for producing these abstracts barely two months after the Congress took place, and they may be forgiven the misprints. Though closely packed, there is generous space between the columns and in the margins, the book opens flat and is a pleasure to handle.

K. H.

**Darlington, C. D. and Bradshaw, A. D. (Editors).** *Teaching Genetics in School and University*. Edinburgh and London, 1963. Oliver and Boyd. Pp. x + 117. Price 21s.

IT IS A good thing for teachers to come together so that they can exchange with others engaged in similar work, ideas on topics and procedures, for the experience of any single one is necessarily limited. With a similar object in mind a group of lecturers in genetics at British universities held a symposium of which *Teaching Genetics* is the chief tangible outcome. It contains twenty papers, all short, dealing with different aspects of genetics, some based on work on organisms, like mice, yeast, and bacteria, others illustrating processes such as transduction and chromosome behaviour, with further ones providing exercises in cytology. Two attractive papers discuss the genetics of wild white clover, and C. D. Darlington writes imaginatively of the interest and information to be derived from a garden of genetic variation which he is building up. Some additional notes on practical points and sources of information increase the usefulness of the publication, which is a credit to its publishers and editors.

Of the value of the book as a whole, and of its separate parts, those who are directly concerned are best able to judge. To an outsider, the interest shifts to what is missing. J. M. Thoday considers that the function of a department of genetics is not to train undergraduate specialists, but while carrying out research and attracting men working for higher degrees, its first duty should be to teach and interest people who are never going to be geneticists, such as students of zoology, biochemistry, medicine and agriculture. Yet the book itself is concerned solely with practical techniques in the pure science of genetics; it has nothing to say about the teaching situation and techniques of exposition; no reference is made to possible relationships between genetics and other intellectual disciplines, and even its place in modern evolutionary theory is ignored. Still further from the minds of the organizers of the symposium was any thought about the economic, social and cultural applications of a science which has already brought about transformations in crop husbandry and horticulture, which is

penetrating into forestry, and which on present developments promises to have important contributions to make to human betterment. The book provides *training* in genetics, not *education*. It cannot be wondered at, therefore, that A. D. Bradshaw, on his experience as an examiner, is dissatisfied with the teaching of the subject in schools. For to sixth form pupils the subject is mainly an exercise in mental gymnastics, detached from reality, all the more because at school level good practical demonstrations are not easy to find. Besides, these pupils are heavily pressed for time; at university level something ought to be done to relieve the pressure on their syllabus which at present acts as a direct inducement for rushed, ill-digested work.

R. WEATHERALL

### ZOOLOGY

**Napier, John, and Barnicot, N. A.** (Editors). *The Primates*. London, 1963. Symposia of the Zoological Society of London, No. 10. Academic Press for the Zoological Society. Pp. 285. Price 90s. (paper); 100s. (cloth).

PRIMATES ARE AT last receiving the research attention they so richly deserve. The ongoing *Primatologia* volumes and new journal *Folia Primatologica* indicate the general breadth of interests in this group. In a rapidly growing discipline such as Primatology, there is perhaps something specially valuable to be gained by the meeting of various workers with a common interest. The book under review at least demonstrates the success of one such get-together.

This symposium volume is the result of co-operation by the Anatomical Society of Great Britain and Ireland, the Society for the Study of Human Biology, and the Zoological Society of London. The three-day meeting was held at the Zoological Society offices in London, Dr. John Napier bearing the brunt of the organization.

Both editors and contributors are to be congratulated on the breadth of the primate field covered in this monograph. The papers are neatly separated into three parts: I, Primate

behaviour in the wild and in captivity; II, Functional anatomy of Primates; III, Characters of genetical interest in Primates. For each of these sessions the meeting benefited from separate chairmen, namely, Professors Sir Solly Zuckerman, J. Z. Young and L. S. Penrose, the concluding remarks of each being included in the publication.

The first part of the monograph, comprising ten papers, covers ecological variation in the Chacma baboon, feeding and other behavioural aspects of wild gorillas, chimpanzees and baboons, and captive *Macaca nemestrina*; as well as tool using in the Capuchin monkey, a comparative study of facial expressions, and "proto-hominid" behaviour in primates. Also in this section is a note by W. C. Osman Hill on the Ufiti (*Pan satyrus*) in Nyasaland, and an important study on the evolution of vocalization in Old World monkeys and apes.

Part II comprises six contributions. These range from a consideration of factors determining skull form to the complex problem of locomotory variation in primates (including a valuable study of relative lengths of the foot).

The final part of the book, on genetical aspects, represents a very new but extremely important facet of primate studies. Since World War II, a considerable corpus of data has been collected on comparative chromosome morphology, the major blood groups, serum protein variations, and PTC tasting; all of which are dealt with in some detail here. There is also a valuable "survey" article by Neil Tappen on Genetics and Systematics in the Study of Primate Evolution, and useful remarks on problems and future possibilities in the final chapter called The Genetical Study of Primates.

As the Societies associated with this meeting demonstrate, the data is of considerable interest to far more than zoologists. Indeed investigations into human variation, in modern and earlier man, will benefit enormously from such studies.

It may be mentioned that illustrations are of a high standard throughout. Considered together, the references given at the end of each paper provide a useful survey of Primate literature.

DON BROTHWELL